# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES (Attorney Docket № 14184US02)

In the Application of:

Ed H. Frank

Serial No. 10/658,142

Filed: September 9, 2003

For: METHOD AND SYSTEM FOR

LOCATION BASED

CONFIGURATION OF A WIRELESS ACCESS POINT (WAP) AND AN ACCESS DEVICE IN A HYBRID WIRED/WIRELESS NETWORK

Examiner: Jung H. Park

Group Art Unit: 2419

Confirmation No. 5401

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#### **APPEAL BRIEF**

Mail Stop Appeal Brief – Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is an appeal from an Office Action dated May 29, 2008 ("Final Office Action"), in which claims 1-32 were finally rejected. The Applicant respectfully requests that the Board of Patent Appeals and Interferences ("Board") reverses the final rejection of claims 1-32 of the present application. The Applicant notes that this Appeal Brief is timely filed within the period for reply that ends on December 10, 2008.

# REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))

Broadcom Corporation, a corporation organized under the laws of the state of California, and having a place of business at 5300 California Avenue, Irvine, California 92617, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel 014225, Frame 0118 in the PTO Assignment Search room.

# RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

# STATUS OF THE CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-32 were finally rejected. Pending claims 1-32 are the subject of this appeal.

The present application includes claims 1-32, which are pending in the present application. Claims 1-9, 11-19, 21-29, 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,875,185 ("Wang"), in view of U.S. Patent No. 5,371,738 ("Moelard"). *See* Final Office Action at page 2. Claims 10, 20

and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang, in view of Moelard, further in view of U.S. Patent No. 7,200,673 ("Augart"). *See id.* at page 6. The Applicant identifies claims 1-32 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

# STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))

The Applicant has not amended any claims subsequent to the final rejection of claims 1-32 mailed on May 29, 2008.

# SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R. § 41.37(c)(1)(v))

The invention of claim 1 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 8-10, Figures 2-4, as well as in paragraphs 46-57. Aspects of the invention provide a method and system for location based configuration of a wireless access point and an access device in a hybrid wired/wireless network. *See* the present specification at page 8, II. 2-4. A method for providing location based configuration in a hybrid wired/wireless network may include identifying a location (e.g., step 406 in FIG. 4) of a network device (e.g., devices 322, ..., 338 in FIG. 3) within the hybrid wired/wireless network. *See id.* at p. 8, II.

4-6. Configuration information corresponding to the determined location of the network device may be determined (e.g., step 408 in FIG. 4). *See id.* at p. 8, II. 6-7. The determined configuration information may be communicated to the networking device in order to facilitate location based configuration of the network device (e.g., step 410 in FIG. 4). *See id.* at p. 8, II. 7-9. The network device may include, but is not limited to, an access device, an access point and a switching device. *See id.* at p. 8, II. 9-10.

Claims 2-10 are dependent upon claim 1.

The invention of claim 11 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 8-10, Figures 2-4, as well as in paragraphs 46-57. Another aspect of the invention provides a machine-readable storage, having stored thereon a computer program having at least one code section for providing location based configuration in a hybrid wired/wireless network, the at least one code section executable by a machine for causing the machine to perform the steps described above. *See id.* at p. 9, II. 1-5.

Claims 12-20 are dependent upon claim 11.

The invention of claim 21 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 8-10, Figures 2-4, as well as in paragraphs 46-57. Another aspect of the invention provides a system for location based configuration in a hybrid wired/wireless network. *See id.* at p. 9, II. 1-5. The system may include an identifier adapted to identify a location (e.g., step 406 in FIG. 4) of a network device (e.g., devices 322, ..., 338 in FIG.

3) within the hybrid wired/wireless network, and a determinator adapted to determine configuration information (e.g., step 408 in FIG. 4) corresponding to the determined location of the network device. *See id.* at p. 9, II. 1-5. A communicator may be adapted to communicate the determined configuration information to the networking device for providing location based configuration of the network device (e.g., step 410 in FIG. 4). *See id.* at p. 9, II. 1-5.

Claims 22-32 are dependent upon claim 21.

# GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-9, 11-19, 21-29, 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,875,185 ("Wang"), in view of U.S. Patent No. 5,371,738 ("Moelard"). Claims 10, 20 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang, in view of Moelard, further in view of U.S. Patent No. 7,200,673 ("Augart").

# ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))

In the Final Office Action, claims 1-9, 11-19, 21-29, 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Moelard. Claims 10, 20 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang in view of Moelard, further in view of Augart.

# I. The Proposed Combination of Wang and Moelard Does Not Render Claims 1-9, 11-19, 21-29, and 31-32 Unpatentable

### A. Rejection of Independent Claims 1, 11, and 21

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network," as recited by the Applicant in independent claim 1.

The Final Office Action states the following with regard to claim 1:

- moving a location (moving of MTa using location message, see 104 fig.9A) of a network device (MTa, see 102 fig.9A) within the hybrid wired/wireless network (as shown in fig.4), the network device being movable within the hybrid wired/wireless network (Mobile Terminal is movable, see fig.4);

. .

Wang discloses that a mobile station moves to a new coverage area where it will be located by sending a location message of the new base station to the original base station, but Wang does not explicitly disclose the limitation of "identifying a location of a mobile station. That is, finding

the new coverage area where the mobile device will be belonged by the new base station is equivalent to identifying a location of the mobile device. However, the examiner provides a second reference to meet the limitation. Moelard discloses the method of identifying the location of the mobile wireless station relative to the base station (see col.2, In.57-58). Therefore, it would have been obvious, to one of ordinary skill in the art at the time of applicant's invention to apply the method of identifying a location of a mobile device of Moelard into the hand over method of Wang in order to provide seamless service during the hand over of mobile device.

See the Final Office Action at pages 2-3. The Final Office Action relies for support on steps 104-110 in Figure 9a of Wang. Wang discloses the following with regard to Figure 9a:

FIGS. 9a and 9b are a flow chart of a preferred handoff method 100 according to the inventive method. The preferred method begins when mobile terminal MTa moves from a previous coverage area Ci covered by BS<sub>ORIG</sub> to a new coverage area C1 covered by BS<sub>NEW</sub> (step 102). When this happens MTa issues two messages. It issues to BS<sub>ORIG</sub> a "location message" containing the location of BS<sub>NEW</sub>. It issues to BS<sub>NEW</sub> a "connection message" containing VCC<sub>k,a</sub>, where k=1,2, . . . n (step 104). When BS<sub>ORIG</sub> receives the "location message", it issues to the switch to which it is connected, via of the handoff VC, a "routing message" containing VCC<sub>k,a</sub>, the location of BS<sub>ORIG</sub>, and the location of BS<sub>NEW</sub> (step 106). The switch to which BS<sub>ORIG</sub> is connected compares the location of BS<sub>ORIG</sub> and the location of BS<sub>NEW</sub> and determines if MTa's mobility is intra- or inter-switch (step 108).

See Wang, col. 8, lines 30-45 (emphasis added). Initially, the Applicant points out that Figure 9a of Wang describes a "seamless handoff method" and it is not related to providing location based configuration in a hybrid wired/wireless network. More

specifically, Wang uses virtual channel connections (VCCs), which are identified by VCC characteristics, to achieve the seamless handoff.

The Applicant points out that the "location message" of Wang is for purposes of identifying the location of a base station BS<sub>NEW</sub> (the Final Office Action is apparently equating the "network device" limitation of Applicant's claim 1 with the base station BS<sub>NEW</sub>). Since a base station, such as BS<sub>NEW</sub>, as well as its corresponding switch, such as switch 54, are all <u>stationary</u> and are not movable within the wireless network, the "location message" disclosed by Wang in Figure 9a does not identify a location of a network device within a hybrid wired/wireless network, where the network device, identified by the Final Office Action as BS<sub>NEW</sub>, is movable within the hybrid wired/wireless network. Since the only movable network device is the mobile terminal MT, the Applicant points out that Wang is silent as to identifying a location of the mobile terminal MT.

Wang discloses that a "location message" is issued to the original base station  $BS_{ORIG}$ . However, this "location message" contains the location of the new base station  $BS_{NEW}$ , and it does not contain the location of the mobile terminal ( $MT_a$ ). Wang only identifies the location of the base station and it does not identify a location of the mobile device. In fact, Wang does not require the determination of, or the use in any other way, of location information of the mobile terminal.

Moelard does not overcome the above deficiencies of Wang as it does not disclose that finding the coverage area of the base station is equivalent to "identifying a location of the mobile device." The Final Office Action relies on col. 2, lines 57-58 of Moelard, which simply discloses that each base station may maintain a dynamic filtering database with locations of the mobile terminal in relation to the base station. However, Moelard does not disclose that finding the coverage area of the base station is equivalent to identifying a location of the mobile device, or that the location of the base station is used in any way to identify the location of the mobile device.

Therefore, the Applicant maintains that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network," as recited by the Applicant in independent claim 1.

Furthermore with regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "determining configuration information corresponding to said determined location of said network device," as recited by the Applicant in independent claim 1.

The Final Office Action states the following with regard to claim 1:

Regarding claims 1 and 21, Wang discloses a method [and a system] for providing location based configuration in a hybrid wired/wireless network, the method comprising:

\* \* \*

- determining configuration information (connecting message, see 104 fig.9A) corresponding to the determined location of the network device (MTa moves from old BS to new BS, see 104 fig.9A);

See the Final Office Action at page 3. The Examiner is equating Applicant's "configuration information" with Wang's "connecting message." The Applicant points out that, as stated in step 104 of Wang's FIG. 9a, the "connecting message" consists of virtual channel connection (VCC) information. Furthermore, in instances of intra-switch signal processing (e.g., FIG. 4 of Wang), the virtual channel is used between a base station and a switch. See Wang, col. 6, lines 7-9. In instances of inter-switch signal processing (e.g., FIG. 6 of Wang), the virtual channel is used only between the base stations. See Wang, col. 7, lines 18-19. In this regard, in both signal processing scenarios disclosed by Wang, the VCC corresponds only to a base station and/or a switch and it does not correspond to any of the MTs. Therefore, the Applicant maintains that Wang does not disclose or suggest at least the limitation of "determining configuration information corresponding to said determined location of said network device," as recited by the Applicant in independent claim 1. Moelard does not overcome the above deficiency of Wang.

Therefore, the Applicant maintains that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "determining configuration information corresponding to said determined location of said network device," as recited by the Applicant in independent claim 1.

Furthermore with regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "communicating said determined configuration information to said networking device for providing location based configuration of said network device," as recited by the Applicant in independent claim 1.

The Final Office Action states the following with regard to claim 1:

Regarding claims 1 and 21, Wang discloses a method [and a system] for providing location based configuration in a hybrid wired/wireless network, the method comprising:

\* \* \*

- communicating the determined configuration information to the networking device (communication between old BS and Switch, see 106 fig.9A) for providing location based configuration of the network device (106 fig.9A).

See the Final Office Action at page 3. The Final Office Action relies for support on step 106 in Figure 9a of Wang. Step 106 in Figure 9a of Wang discloses that after  $BS_{ORIG}$  receives the "location message", **it issues to the switch** to which it is connected, a "routing message" containing  $VCC_{k,a}$  the location of  $BS_{ORIG}$ , and the

location of  $BS_{NEW}$ . The Applicant points out that the "routing message" is issued to the switch, i.e., it is not issued or communicated to the base station  $BS_{NEW}$ , which the Final Office Action has equated to Applicant's "network device." Furthermore, the Applicant points out that the "routing message" contains information that is used for establishing a handoff between two base stations and it is not used to configure a network device, as recited in Applicant's claim 1. Moelard does not overcome the above deficiency of Wang.

Therefore, the Applicant maintains that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "communicating said determined configuration information to said networking device for providing location based configuration of said network device," as recited by the Applicant in independent claim 1.

Accordingly, independent claim 1 is not anticipated by Wang and is allowable. Independent claims 11 and 21 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 11 and 21 are also allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1.

### B. Examiner's Response to Arguments

The Examiner states the following in the Final Office Action:

At pages 2-4, applicant argues that Wang fails to disclose, "identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network." In reply, Wang discloses that a mobile station moves to a new coverage area where it will be located by sending a location message of the new base station to the original base station. That is, finding a new coverage area where the mobile device will be belonged by the new base station is equivalent to identifying a location of the mobile device. However, the examiner provides a second reference to meet the limitation. Moelard discloses the method of identifying the location of the mobile wireless station relative to the base station as described in col.2, In.57-58. Therefore, the examiner respectively disagrees.

See the Final Office Action at pages 6-7. The Applicant respectfully disagrees with the above argument. As already pointed out in the July 30, 2007 response and in the January 16, 2008 pre-appeal brief, referring to FIGs. 4 and 6 of Wang, the only network device that is "movable" within the network is the mobile terminal (MT) or cell (C) 64. The base stations (BS) 60a, 60b, as well as the switches 54, 58 that are used during handoff, are all stationary. The above Final Office Action citation states "finding a new coverage area where the mobile device will be belonged by the new base station is equivalent to identifying a location of the mobile device." The Applicant fails to see how "moving of MTa using location message between old BS and new BS" reads on "identifying a location of a network device," as recited in Applicant's claim 1. The Applicant also fails to see how finding the coverage area of the base station is equivalent to "identifying a location of the mobile device." As already stated in the July 30, 2007 response and in the January 16, 2008 pre-appeal brief, in step 104 of FIG. 9A, Wang discloses that a "location message" is issued to the original base station BS<sub>ORIG</sub>. However, this "location message" contains the location of the

new base station BS<sub>NEW</sub>, and it does not contain the location of the mobile terminal (MT<sub>a</sub>). Wang only identifies the location of the base station and it does not identify a location of the mobile device. In fact, Wang does not require the determination of, or the use in any other way, of location information of the mobile terminal. Moelard does not overcome the above deficiencies of Wang as it does not disclose that finding the coverage area of the base station is equivalent to "identifying a location of the mobile device."

Therefore, the Applicant maintains that the combination of Wang-Moelard does not disclose or suggest at least the limitation of "identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network," as recited by the Applicant in independent claim 1.

### C. Rejection of Dependent Claims 2, 12, and 22

Claims 2, 12, and 22 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 2, 12, and 22 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "wherein said network device is selected from the group consisting of an access device, an access point and a switching device," as recited by the Applicant in claims 2, 12, and 22.

With regard to claim 2, the Final Office Action states the following at page 3:

Regarding claim 2, Wang disclose, "wherein the network device is selected from the group consisting of an access device (Mobile Terminal, see 64 fig.4), an access point (BS, see 60a-b fig.2) and a switching device (switch, see 54 fig.4)."

As explained in Section I-A above, the Examiner is equating the "network device" limitation of Applicant's claim 1 with Wang's base station  $BS_{NEW}$ . Therefore, the Applicant submits that the network device is not selected from the group consisting of an access device, an access point and a switching device, as recited by the Applicant in claims 2, 12, and 22. Accordingly, the Applicant submits that claims 2, 12, and 22 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2, 12, and 22.

### D. Rejection of Dependent Claims 3, 13, and 23

Claims 3, 13, and 23 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 3, 13, and 23 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device," as recited by the Applicant in claims 3, 13, and 23.

With regard to claim 3, the Final Office Action states the following at page 4:

Regarding claim 3, Wang discloses, "further comprising discovering configuration information from at least one of a database, and a memory associated with at least one of the access point and the switching device (databases, see fig.8A and 108 fig.9A)."

As explained in Section I-A above, the Examiner is equating the "configuration information" of Applicant's claim 1 with Wang's "connecting message," which consists of virtual channel connection (VCC) information. Initially, the Applicant points out that Wang's "connecting message" does not even relate to any of the mobile terminals (the only "network device" that is movable within the hybrid network). The Applicant also points out that Wang, including FIGS. 8A and 9A referenced by the Examiner, does not disclose that Wang's "connecting message" is discovered from a database or a memory associated with an access point or a switching device. Accordingly, the Applicant submits that claims 3, 13, and 23 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 3, 13, and 23.

## E. Rejection of Dependent Claims 4, 14, and 24

Claims 4, 14, and 24 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 4, 14, and 24 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or

suggest at least the limitation of "said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information," as recited by the Applicant in claims 4, 14, and 24.

With regard to claim 4, the Final Office Action states the following at page 4:

Regarding claim 4, Wang discloses, "wherein the discovering further comprises scanning the database and the memory by the access device, access point and switching device to discover the configuration information (scanning for comparison, see 108 fig.9A)."

As explained in Section I-A above, the Examiner is equating the "configuration information" of Applicant's claim 1 with Wang's "connecting message," which consists of virtual channel connection (VCC) information. Initially, the Applicant points out that Wang's "connecting message" does not even relate to any of the mobile terminals (the only "network device" that is movable within the hybrid network). The Applicant also points out that Wang, including FIG. 9A referenced by the Examiner, does not disclose that Wang's "connecting message" is discovered from a database or a memory associated with an access point or a switching device, or that the process of discovering includes scanning a database or memory. Accordingly, the Applicant submits that claims 4, 14, and 24 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 4, 14, and 24.

### F. Rejection of Dependent Claims 5, 15, and 25

Claims 5, 15, and 25 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 5, 15, and 25 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "said determining comprises scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information," as recited by the Applicant in claims 5, 15, and 25.

With regard to claim 5, the Final Office Action states the following at page 4:

Regarding claim 5, Wang disclose, "wherein the determining further comprises scanning at least one RF channel by at least one of the access point and the access device to discover the configuration information (wireless transmission, see col.2, In.1-6)."

The Applicant would like to point out that even though Wang discloses, at the above citations, that at the time of handoff, the mobile terminal (MT) transmits a wireless transmission to its current base station (BS), Wang clearly does not disclose or suggest any determining of configuration information corresponding to a determined location of a network device. Wang also does not disclose that such determining includes scanning at least one RF channel by an access point and/or an access device to discover the configuration information, as recited by the Applicant in claims 5, 15, and 25. Accordingly, the Applicant submits that claims 5, 15, and 25 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 5, 15, and 25.

### G. Rejection of Dependent Claims 6, 16, and 26

Claims 6, 16, and 26 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 6, 16, and 26 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "wherein said RF channel is at least one of a broadcast channel and a setup channel," as recited by the Applicant in claims 6, 16, and 26.

With regard to claim 6, the Final Office Action states the following at page 4:

Regarding claim 6, Wang lacks discloses, "wherein the RF channel is at least one of a broadcast channel and a setup channel (col.2, In.1-6)."

The Applicant would like to point out that even though Wang discloses, at the above citations, that at the time of handoff, the mobile terminal (MT) transmits a wireless transmission to its current base station (BS), Wang clearly does not disclose or suggest any determining of configuration information corresponding to a determined location of a network device. Wang also does not disclose that such determining includes scanning at least one RF channel by an access point and/or an access device to discover the configuration information, or that the RF channel is a broadcast channel and/or a setup channel, as recited by the Applicant in claims 6, 16, and 26.

Accordingly, the Applicant submits that claims 6, 16, and 26 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 6, 16, and 26.

### H. Rejection of Dependent Claims 7, 17, and 27

Claims 7, 17, and 27 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 7, 17, and 27 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "updating said network device with said communicated configuration information," as recited by the Applicant in claims 7, 17, and 27.

With regard to claim 7, the Final Office Action states the following at page 4:

Regarding claim 7, Wang discloses, "further comprising updating the network device with the communicated configuration information (116 fig.9B)."

Referring to FIG. 9B of Wang, step 116 discloses that the new base station (BS<sub>NEW</sub>) adds the virtual path identifier (VPI) and virtual channel identifier (VCI) to its MT pair-VCC database (or MVD), and then re-starts the data transmission procedure without translating from the frame format into the ATM cell format. In this regard, Wang, including its FIG. 9B, does not disclose any updating of the network device with

communicated configuration information (the Applicant notes that "network device" is being erroneously equated by the Examiner to Wang's new base station ( $BS_{NEW}$ ), since  $BS_{NEW}$  is not "movable" within the network). Accordingly, the Applicant submits that claims 7, 17, and 27 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 7, 17, and 27.

### I. Rejection of Dependent Claims 8, 18, and 28

Claims 8, 18, and 28 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 8, 18, and 28 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed," as recited by the Applicant in claims 8, 18, and 28.

With regard to claim 8, the Final Office Action states the following at page 4:

Regarding claim 8, Wang discloses, "further comprising dynamically updating the network device with the communicated information whenever it is determined that at least one network setting corresponding to a location of the network device has changed (seamless handoff as described in 9A-B)."

Referring to FIG. 9B of Wang, step 116 discloses that the new base station (BS<sub>NEW</sub>) adds the virtual path identifier (VPI) and virtual channel identifier (VCI) to its MT pair-VCC database (or MVD), and then re-starts the data transmission procedure without translating from the frame format into the ATM cell format. In this regard, Wang, including its FIGS. 9A-9B, does not disclose any updating of the network device with communicated configuration information (the Applicant notes that "network device" is being erroneously equated by the Examiner to Wang's new base station (BS<sub>NEW</sub>), since BS<sub>NEW</sub> is not "movable" within the network). Furthermore, neither FIG. 9A nor FIG. 9B discloses any dynamic updating of the network device "with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed," as recited in Appellant's claims 8, 18, and 28. Accordingly, the Applicant submits that claims 8, 18, and 28 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 8, 18, and 28.

### J. Rejection of Dependent Claims 9, 19, and 29

Claims 9, 19, and 29 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 9, 19, and 29 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Wang-Moelard does not disclose or

suggest at least the limitation of "said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols," as recited by the Applicant in claims 9, 19, and 29.

With regard to claim 9, the Final Office Action states the following at page 5:

Regarding claim 9, Wang discloses, "wherein the determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols (114 fig.9B)."

The Applicant would like to point out that even though Wang discloses, at the above citation (step 114 in FIG. 9B), that the switch sends to BS<sub>NEW</sub> a message containing all of the new VPI/VCI pairs for the mobile terminal, Wang clearly does not disclose or suggest that the VPI/VCI pairs include bandwidth etiquette and sharing rules, channel availability, preferred channel, and/or available communication protocols, as recited by the Applicant in claims 9, 19, and 29. Accordingly, the Applicant submits that claims 9, 19, and 29 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 9, 19, and 29.

### K. Rejection of Dependent Claim 31

Claim 31 depends on independent claim 21. Therefore, the Applicant submits that claim 31 is allowable over the references cited in the Final Office Action at least for

the reasons stated above with regard to claim 21. The Applicant also submits that Wang-Moelard does not disclose or suggest at least the limitation of "at least one querying agent for querying a network device for location information," as recited by the Applicant in claim 31.

With regard to claim 31, the Final Office Action states the following at page 5:

Regarding claim 31, Wang discloses, "further comprising at least one querying agent for querying a network device for location information (not shown agent for controlling databases, see fig.8B)."

As already explained above in Section I-A, Wang does not disclose any determination of location information for the mobile terminal, which is the only network device that is movable within Wang's network. Furthermore, Wang, including FIG. 8B, does not disclose any querying agent for querying such network device for location information, as recited by the Applicant in claim 31. Accordingly, the Applicant submits that claim 31 is allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 31.

### L. Rejection of Dependent Claim 32

Claim 32 depends on independent claim 21. Therefore, the Applicant submits that claim 32 is allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claim 21. The Applicant also submits that

Wang-Moelard does not disclose or suggest at least the limitation of "at least one informing agent for informing at least one of said access point, access device and switching device of at least one network parameter related to location based configuration," as recited by the Applicant in claim 32.

With regard to claim 32, the Final Office Action states the following at pages 5-6:

Regarding claim 32, Wang discloses, "further comprising at least one informing agent for informing at least one of the access point, access device and switching device of at least one network parameter related to location based configuration (not shown agent for informing location, see the flow chart of fig.9A).

As already explained above in Section I-A, Wang does not disclose any determination of location information for the mobile terminal, which is the only network device that is movable within Wang's network. Furthermore, Wang, including FIG. 9A, does not disclose any informing agent for "informing at least one of said access point, access device and switching device of at least one network parameter related to location based configuration," as recited by the Applicant in claim 32. Accordingly, the Applicant submits that claim 32 is allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 32.

# II. The Proposed Combination of Wang, Moelard, and Augart Does Not Render Claims 10, 20 and 30 Unpatentable

Claims 10, 20, and 30 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 10, 20, and 30 are allowable over the references cited in the Final Office Action at least for the reasons stated above with regard to claims 1, 11, and 21, respectively. The Applicant also submits that Wang-Moelard-Augart does not disclose or suggest at least the limitation of "triangulating locations of network routing devices named in said received routing information to determine said location of said network device," as recited by the Applicant in claims 10, 20, and 30.

With regard to claims 10, 20, and 30, the Final Office Action states the following at page 6:

Regarding claims 10, 20, and 30, Wang discloses, "triangulating locations of network routing devices named in the received routing information to determine the location of the network device (as shown in fig.4)", but lacks what Augart discloses, "wherein the determining further comprises: sending a ping message (a probe packet, see 150 fig.2 and col.4, ln.56-67) to at least one network routing device; receiving routing information associated with the ping message (TTL values, see col.4, ln.56-67)." Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the probe packet taught by Augart into the hybrid network of Wang and Moelard in order to determine a geographical location of a network device for seamless service on a network.

As already explained above in Section I-A, Wang does not disclose any determination of location information for the mobile terminal, which is the only network device that is movable within Wang's network. The Examiner relies for support on FIG. 4, which simply discloses intra-switch mobility in instances when a mobile terminal

moves from one BS coverage area to another, without any determination of the location of the mobile terminal. Wang, including FIG. 4, does not disclose or suggest any triangulating locations of network routing devices named in received routing information for purposes of determining location of the network device, as recited by the Applicant in claims 10, 20, and 30. Accordingly, the Applicant submits that claims 10, 20, and 30 are allowable over the references cited in the Final Office Action at least for the above reasons.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 10, 20, and 30.

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CONCLUSION

For at least the foregoing reasons, the Applicant submits that claims 1-32 are in

condition for allowance. Reversal of the Examiner's rejection and issuance of a patent

on the application are therefore requested.

The Commissioner is hereby authorized to charge \$510 (to cover the Brief on

Appeal Fee) and any additional fees or credit any overpayment to the deposit account

of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: 02-DEC-2008

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### CLAIMS APPENDIX (37 C.F.R. § 41.37(c)(1)(viii))

1. A method for providing location based configuration in a hybrid wired/wireless network, the method comprising:

identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

determining configuration information corresponding to said determined location of said network device; and

communicating said determined configuration information to said network device for providing location based configuration of said network device.

- 2. The method according to claim 1, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.
- 3. The method according to claim 2, comprising discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.
- 4. The method according to claim 3, wherein said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information.

- 5. The method according to claim 2, wherein said determining comprises scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information.
- 6. The method according to claim 5, wherein said RF channel is at least one of a broadcast channel and a setup channel.
- 7. The method according to claim 1, comprising updating said network device with said communicated configuration information.
- 8. The method according to claim 7, comprising dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.
- 9. The method according to claim 1, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.
  - 10. The method according to claim 1, wherein said determining comprises: sending a ping message to at least one network routing device; receiving routing information associated with said ping message; and

triangulating locations of network routing devices named in said received routing information to determine said location of said network device.

11. A machine-readable storage, having stored thereon a computer program having at least one code section for providing location based configuration in a hybrid wired/wireless network testing, the at least one code section executable by a machine for causing the machine to perform the steps comprising:

identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

determining configuration information corresponding to said determined location of said network device; and

communicating said determined configuration information to said network device for providing location based configuration of said network device.

- 12. The machine-readable storage according to claim 11, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.
- 13. The machine-readable storage according to claim 12, comprising code for discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.

- 14. The machine-readable storage according to claim 13, wherein said discovering code section comprises code for scanning said database and said memory by said access device, access point and switching device to discover said configuration information.
- 15. The machine-readable storage according to claim 12, wherein said determining code section comprises code for scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information.
- 16. The machine-readable storage according to claim 15, wherein said RF channel is at least one of a broadcast channel and a setup channel.
- 17. The machine-readable storage according to claim 11, comprising code for updating said network device with said communicated configuration information.
- 18. The machine-readable storage according to claim 17, comprising code for dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.

- 19. The machine-readable storage according to claim 11, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.
- 20. The machine-readable storage according to claim 11, wherein said determining code section comprises code for:

sending a ping message to at least one network routing device;
receiving routing information associated with said ping message; and
triangulating locations of network routing devices named in said received routing
information to determine said location of said network device.

21. A system for providing location based configuration in a hybrid wired/wireless network, the system comprising:

an identifier adapted to identify a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

- a determinator adapted to determine configuration information corresponding to said determined location of said network device; and
- a communicator adapted to communicate said determined configuration information to said network device for providing location based configuration of said network device.

- 22. The system according to claim 21, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.
- 23. The system according to claim 22, comprising a discoverer adapted to discover configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.
- 24. The system according to claim 23, comprising a scanner adapted to scan said database and said memory by said access device, access point and switching device to discover said configuration information.
- 25. The system according to claim 22, comprising a scanner adapted to scan at least one RF channel by at least one of said access point and said access device to discover said configuration information.
- 26. The system according to claim 25, wherein said RF channel is at least one of a broadcast channel and a setup channel.
- 27. The system according to claim 21, comprising and updater adapted to update said network device with said communicated configuration information.

- 28. The system according to claim 27, wherein said updater may be adapted to dynamically update said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.
- 29. The system according to claim 21, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.
  - 30. The system according to claim 21, comprising:

a sender adapted to send at least one ping message to a at least one network routing device;

a receiver adapted to receive routing information associated with said ping message; and

a triangulator adapted to triangulate locations of network routing devices named in said received routing information to determine said location of said network device.

31. The system according to claim 21, comprising at least one querying agent for querying a network device for location information.

32. The system according to claim 22, comprising at least one informing agent for informing at least one of said access point, access device and switching device of at least one network parameter related to location based configuration.

# EVIDENCE APPENDIX (37 C.F.R. § 41.37(c)(1)(ix))

- (1) United States Patent No. 5,875,185 ("Wang"), entered into record by the Examiner in the April 30, 2007 Office Action.
- (2) United States Patent No. 5,371,738 ("Moelard"), entered into record by the Examiner in the May 29, 2008 Office Action.
- (3) United States Patent No. 7,200,673 ("Augart"), entered into record by the Examiner in the April 30, 2007 Office Action.

# RELATED PROCEEDINGS APPENDIX (37 C.F.R. § 41.37(c)(1)(x))

The Appellant is unaware of any related appeals or interferences.